

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,869	04/16/2001	Mark Vange	CIRC013	5581

25235 7590 08/25/2004
HOGAN & HARTSON LLP
ONE TABOR CENTER, SUITE 1500
1200 SEVENTEENTH ST
DENVER, CO 80202

EXAMINER

LIN, WEN TAI

ART UNIT PAPER NUMBER

2154

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,869

Applicant(s)

VANGE ET AL.

Examiner

Wen-Tai Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2001 and 26 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/26/02.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-27 are presented for examination.
2. Claims 13-19 are objected to because the term "the priority values" appear to lack antecedent basis in claim 13.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-18 and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Elleson et al.[U.S. Pat. No. 6459682].

5. As to claims 1 and 4-6, Ellesson teaches the invention as claimed including: a method for prioritizing information within a network comprising the steps:

receiving at least one set of information within a network [Fig.1B; col.4, lines 46-52];

associating at least one priority value with the at least one set of information [col.3, lines 8-20; col.4, lines 56-61]; and

transmitting the at least one set of information across the network at least partially based on the priority value [Abstract].

6. As to claims 2-3, Ellesson teaches that "Packets are categorized into separate streams based on a number of criteria that depend on the terms of SLA and the network capabilities. The Edge Device uses a set of classification rules to determine the appropriate service level category to which the packet is assigned. These rules may be configured in the Edge Device or obtained by querying a Directory Server ..." (see col.4, lines 33-44), wherein information obtained for identifying the senders, resource facilities or communication content by the ingress Edge device (E1) includes "ingress interface, source address, source port, destination address, destination port, protocol id, Class of Service identification, contents of packet, header fields in transport protocol" [col.4, lines 14-32]. As such, it is clear that the priority value must be at least based on the packet content type and user identification because both are needed to identify a service level with respect to a predefined packet content from the Service Level Agreement (SLA) [col.5, lines 48-54], wherein the ingress Edge device (which is an intermediary device

between the client (A1, Fig.1B) and the server (A2, Fig.1B)) selectively determines a priority value based on a value at least associated with the content type and user identification parameters.

7. As to claim 7, Ellesson further teaches that the at least one intermediary server receives a set of priority information via an out-of-band control system [col.3, lines 14-16 and 38-53; col.4, lines 46-52; note that the fact that the directory and control server (see Fig.1B) out side the backbone networks uses different protocols, comparing to the protocol uses in the backbone networks, indicates that both the directory server and the control server are out-of-band nodes Ellesson's system.

8. As to claims 8-10, Ellesson further teaches that the network comprises:

at least one front-end server computer [E1, Fig.1B] operatively connected to at least one client [A1, Fig.1B];

at least one back-end server computer [E2, Fig.1B] operatively connected to at least one server [A2, Fig.1B] and to the at least one front-end server computer, wherein the connection to the front-end server computer is implemented over a heterogeneous network [col.2, lines 23-25; col.4, lines 3-13; note that the Internet is a heterogeneous network], wherein the at least one front-end server computer is responsible for determining at least one priority value for the at least one set of information transmitted to a back-end server and the at least one back-end server computer is responsible for determining at least one priority value for the at least one set of information transmitted

to a front-end [note that for information flowing from A2 to A1, E2 and E1 are the ingress and egress devices, respectively].

9. As to claim 13, Ellesson teaches the invention as claimed including: a method of transmitting requests from a client [A1 Fig.1B] to a request-specified origin server [A2, Fig.1B] comprising the acts of:

 sending one or more requests from one or more client computers, the requests designating an origin server [col.2, lines 23-25];

 determining for each request whether a priority parameter is associated with the request;

 converting the priority parameter to a first priority value; and

 transmitting the requests to the origin server in an order based upon the priority values [col.4, line 28 – col.5, line 6].

10. As to claims 14-15, Ellesson further teaches that the priority parameter is included with the request or determined by performing a lookup in a table [Abstract; col.4, lines 46-52].

11. As to claim 16, Ellesson further teaches that the priority parameter is obtained from the origin server [col.4, line 66 – col.5, line 2; col.7, lines 16-25; i.e., the origin server (or the information provider) can be a customer specified in a SLA for which

Art Unit: 2154

clients's request packet directing to the same origin server is given a specified service level through information provided by the directory].

12. As to claim 17, Ellesson further teaches that the step of sending comprises sending the request with an associated domain-specific user priority parameter [note that the IP address identifying the destination server in a request packet is, by default, a domain-specific priority parameter for looking up a corresponding service level or traffic class in the directory].

13. As to claim 18, Ellesson further teaches that the step of sending comprises sending the request with an associated content priority parameter [i.e., the content information contained in a request packet is a key index for looking up a corresponding service level or traffic class in the directory (see col.4, lines 14-32)].

14. As to claims 11-12 and 20-24, since the features of these claims can also be found in claims 1-10 and 13-18, they are rejected for the same reasons set forth in the rejection of claims 1-10 and 13-18 above.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2154

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 19 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellesson et al.(hereafter "Ellesson")[U.S. Pat. No. 6459682], as applied to claims 1-18 and 20-24 above.

17. As to claim 19, Ellesson does not specifically teach converting the priority information [e.g., a service level or traffic class according to the SLA] to a second priority value for use it or transmitting the response.

However, Ellesson teaches that the priority value is determined based on the initial traffic classes and the existing data flow rates. Since the data flow rates at the source node could be different from that of the destination node, it is clear that the priority values assigned to the response packets may be different from that of the request packet.

18. As to claims 25-27, Ellesson teaches a system/architecture of implementing a service level agreement specifying customer expectations of performance in terms of parameters such as availability, delay, loss, priority and bandwidth for specific traffic characteristics. In other words, the control parameters are associated with a service provider's network resources [col.1, lines 42-52; col.2, lines 38-41; col.5, lines 32-47]. The specified various parameters of priority, for example, are either contained in the

Art Unit: 2154

customer's requesting packets or looked-up from a directory server and are monitored/tracked at an edge device [col.4, lines 46-51] for encoding the headers of packets to determine their network priority [Abstract: lines 10-12].

Ellesson does not specifically teach that how to provide a composite priority value when a plurality of network resources are required to implement a service, wherein the network resources include secure and unsecure resources.

However, it is well known in the art of resource management/allocation to derive a composite priority for a process by weighting over the various characteristics of the resources that are needed for performing the process.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a similar resource management/allocation principle in Ellesson's system when a plurality of network resources are needed to perform a service because at each time there can be only one priority value assigned to an individual service.

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Dupont	[U.S. Pat. No. 5729542];
Chapman et al.	[U.S. Pat. No. 6023456];
Li et al.	[U.S. Pat. No. 5757771];
Hartsell et al.	[U.S. PGPub 20020049608];
Berl et al.	[U.S. Pat. No. 5991302]; and

Art Unit: 2154

Gyllstrom et al. [U.S. Pat. No. 5179708].

20. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (703)305-4875. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:


(703)872-9306 for official communications; and

(703)746-5516 for status inquires draft communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Wen-Tai Lin

August 23, 2004


8/23/04